

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
2 October 2003 (02.10.2003)

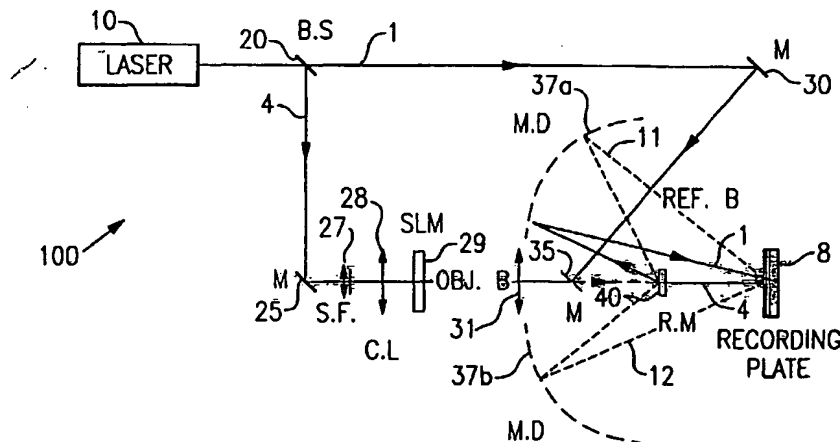
PCT

(10) International Publication Number  
WO 03/081580 A1

- (51) International Patent Classification<sup>7</sup>: G11B 7/0065, G11C 13/04, G03H 1/26, G11B 7/135
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- (21) International Application Number: PCT/EP02/03239
- (22) International Filing Date: 21 March 2002 (21.03.2002)
- (25) Filing Language: English
- (26) Publication Language: English
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Declaration under Rule 4.17:  
— of inventorship (Rule 4.17(iv)) for US only

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(54) Title: METHOD AND APPARATUS FOR RECORDING TO AND READING FROM A DIFFRACTIVE OPTICS MEMORY USING SYMMETRICAL ANGULAR ENCODING



(57) Abstract: The present invention relates to an apparatus and method for reading information from and recording information to a diffractive optics memory (8) using symmetrical angular encoding. A coherent light source (LASER 10) is split to form an object beam (OBJ.B4) and a corresponding reference beam (REF.B1). An optical axis is defined by the object beam being aligned perpendicular to a plane of the diffractive optics memory. A steering mirror (R.M. 40) is configured to direct the reference beam received from the coherent light source to the memory. A first plurality of mirrors (37a) arranged around one side of the optical axis receives the reference beam from the steering mirror and directs the reference beam at a first angle towards the memory. A second plurality of mirrors (37b) arranged around the symmetrical side of the optical axis receives the reference beam from the steering mirror and directs the reference beam at a second angle towards the memory. The first angle is identical to the second angle but formed on the symmetrical side of the optical axis.